Seven Aspects of Loan Size

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Abstract

Attempts to measure the depth of outreach in microfinance usually start—and often end—with loan size. But just what *is* loan size? This paper discusses seven aspects of loan size, each of which affects not only depth of outreach but also profitability. The seven aspects are: term to maturity, dollars disbursed, average balance, dollars per installment, time between installments, number of installments, and "dollar-years of borrowed resources". This paper defines the seven aspects, explains why each one matters, and gives examples of their measurement with data from three Latin American microfinance organizations.

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Seven Aspects of Loan Size

1. Introduction

Ten years ago, self-sustainability was measured with the Subsidy Dependence Index (Yaron, 1992). Now, grades and shades of self-sustainability are recognized, and the SDI is complemented by such measures as Adjusted Return on Assets, Financial Self-sufficiency, and Net Present Cost (Christen, 1997; Schreiner, 1997).

In the same way, depth of outreach has been measured mostly as loan size, usually as dollars disbursed or average balance. But both borrowers and lenders also care about many other aspects of loan size. In addition to dollars disbursed and average balance, this paper defines the following aspects and discusses how they affect outreach and profitability: term to maturity, dollars per installment, time between installments, number of installments, and "dollar-years of borrowed resources".

Each of the seven measures highlights one or more dimensions of loans but ignores other dimensions. Thus, loans may be "large" in some senses but "small" in others. Compared with knowledge of one aspect of loan size, knowledge of all aspects can lead to markedly different choices.

The aspect most often ignored is probably term to maturity. For example, donors often take the amount disbursed as a marker of depth of outreach. Gonzalez-Vega *et al.* (1997) find, however, that while growth in the amount disbursed had slowed for a group of large, mature microfinance organizations in Bolivia, growth in the term to maturity continued. The microlenders increased loan size not by disbursing more per loan but by lengthening terms to maturity. Looking only at amount disbursed, donors would mistakenly have viewed depth of outreach as unchanged rather than decreased.

Likewise, microfinance loans (for example, for the purchase of a fixed asset such as a sewing machine) may differ in term to maturity. Compared with a 2-year loan, a 1-year loan is typically equivalent in amount disbursed, in average balance, and in time between installments; larger in dollars per installment; and smaller in term to maturity, in number of installments, and in "dollar-years of borrowed resources".

Whether a given loan is seen as "large" or "small" depends on which aspects matter most from a given point of view. Borrowers concerned mostly about low monthly payments will see a 2-year loan as smaller than a 1-year loan; borrowers concerned mostly with getting enough cash to make a purchase will see both loans as equivalent; and borrowers concerned mostly with interest costs will see the 30-year loans as larger than the 15-year loan.

The best measures of loan size encompass multiple dimensions. In particular, the measure of "dollar-years of borrowed resources" encompasses all six other aspects. Although virtually unknown and unused to date, "dollar-years of borrowed resources" probably should be the preferred summary measure of loan size. In simple terms, “dollar-years of borrowed resources” is the average balance that would obtain if the loan had a term to maturity of one year.

The rest of this paper defines and explains each of the seven aspects of loan size. It explains the importance of each aspect in terms of depth of outreach and profitability, and it defines formulae for their measurement. Examples of all of the measures are drawn from three large Latin American microfinance organizations. The examples not only show how to compute the measures but they also show that, compared with looking at a single aspect such as amount disbursed, looking at all seven aspects can lead to different conclusions. Finance is the exchange of resources through time; measures of loan size should account explicitly for the passage of time.

2. The seven aspects

To illustrate the measurement of loan size given data generally available to external analysts, Table 1 computes measures of the seven aspects of loan size for three large, broadly targeted microfinance organizations in Latin America.

Figure 1 depicts the seven aspects of loan size for a loan repaid in equal installments. The vertical axis marks cash flows, with positive flows going from the lender to the borrower and negative flows going from the borrower to the lender. The horizontal axis marks time. For simplicity, interest is ignored. Figure 2 depicts typical loans in 1995 from two of the example microfinance lenders from Latin America.

2.1 Term to maturity

In Figure 1, term is measured along the horizontal axis. All else constant, longer loans are larger than shorter ones. For lenders, longer loans generate more interest revenue from a single evaluation and disbursement. On the other hand, longer loans have more chances to fall into arrears and may lead to greater delinquency costs.

For borrowers, longer loans signal shallower outreach because the most creditworthy—and hence the least-poor—usually get the longest loans (Conning, 1998). Term also matters because lenders usually allow borrowers only one loan at a time. Thus, if borrowers use loans to pay for periodic purchases—for example, monthly additions to inventory—shorter terms would be more valuable than longer terms. On the other hand, if loans purchase fixed assets whose returns take longer to realize, longer terms would be more valuable both because such fixed-asset purchases are infrequent and because longer terms better match the size and timing of installments with the size and timing of returns from the fixed asset.

In general, longer loans signal greater profitability but less depth of outreach.

2.1.1 Formulae

The most accurate way to compute average term to maturity uses data on each loan outstanding at a point in time or on each loan disbursed in a year. External analysts, however, usually do not have access to such data. A proxy measure for average term to maturity (in months) that uses commonly-available data is:

$$\text{Term to maturity} = 12 \cdot \left(\frac{\text{Annual average number of loans outstanding}}{\text{Number of loans disbursed in year}} \right). \tag{1}$$

This estimate is based on numbers of loans outstanding and numbers of loans disbursed. An alternative estimate is based on value outstanding and value disbursed:

$$\text{Term to maturity} = 12 \cdot \left(\frac{\text{Annual average value outstanding}}{\text{Value disbursed in year}} \right). \tag{2}$$

Both equations 1 and 2 understate the true average term in a growing portfolio, but the bias is small. To measure term to maturity in years rather than months, remove the multiplicative factor of 12 from the formulae.

2.1.2 Examples

For the three Latin American lenders, the average term based on the number of loans is 4.0 months for lender A, 5.3 months for lender B, and 6.2 months for lender C (Table 1, line c). In contrast, the estimates based on dollars loaned is 3.2 months, 4.1 months, and 5.9 months (line f). (Comparisons could also focus on changes through time for a single given lender rather than differences across lenders.)

With term to maturity measured from loan values, Lender C makes loans that are (5.9 - 4.1) ÷ 4.1 = 44 percent larger than lender B and 84 percent larger than lender A. In contrast, when loan size is measured as amount disbursed, the differences are only 3 percent and 38 percent (Table 1, line g). For these three microlenders, differences in depth of outreach and profitability due to loan size are much larger when seen as term to maturity than when seen as amount disbursed. Accounting explicitly for time—via term to maturity—matters for the measurement of loan size.

2.2 Dollars disbursed

Dollars disbursed is the most common measure of loan size. In Figure 1, dollars disbursed is measured along the vertical axis. This measure ignores time.

For borrowers, dollars disbursed matters because it represents the largest single purchase possible from loan proceeds. For example, a farmer who wants to buy a cow that sells for $100 has little use for a disbursement of only $60 unless she can make up the $40 difference from other sources. Dollars disbursed also represents the addition to overall household liquidity provided by the loan.

For lenders, dollars disbursed affects operational costs and profits in two ways. First, the disbursement is the maximum possible loss due to default. Second, although most of the costs of evaluation and disbursement are fixed, larger loans do have higher per-dollar variable costs because lenders take extra care due to greater risk exposure.

From the standpoint of depth of outreach, smaller disbursements imply greater average depth if poorer borrowers are riskier and so qualify only for smaller loans. Furthermore, poorer borrowers have fewer complementary assets to combine in production with the large, lumpy assets that might be purchased with a large disbursement. For example, a farmer with two hectares of land is unlikely to use a disbursement to buy a tractor. Thus, poorer borrowers are more likely to want smaller loans than less-poor borrowers.

In general, larger disbursements mean more profits but less depth of outreach.

2.2.1 Formulae

Given the aggregate annual data usually available to external analysts, the formula the amount disbursed is:

$$\text{Amount disbursed} = \frac{\text{Dollars disbursed in year}}{\text{Number of loans disbursed in year}}. \tag{3}$$

2.2.2 Examples

Average disbursements in 1995 by the Latin American lenders were \$494 for lender A, \$658 for lender B, and \$681 for lender C (Table 1, line g). As noted above, Lender C disbursed 3 percent more than lender B and 38 percent more than lender A.

2.2.3 International comparisons

Cross-country comparisons of loan size often attempt to account for different levels of income by dividing average dollars disbursed by per-capita annual GNP:

$$\frac{\text{Average dollars disbursed}}{\text{Per-capita annual GNP}}. \tag{4}$$

In 1995, annual per-capital GNP in the country of the three Latin American lenders was about \$900. As a share of average dollars disbursed, per-capita GNP was 0.55 for lender A, 0.73 for lender B, and 0.76 for lender C (Table 1, line i). Because the lenders are in the same country, normalizing by per-capita annual GNP does not change their relationships. In general, however, normalization changes the rankings.

As a benchmark for depth of outreach, this ratio has two weaknesses. First, per-capita GNP typically exceeds both median GNP and the poverty-line income because a few very rich people pull the average up. Thus, although the ratios are useful for relative comparisons across countries with similar income distributions, they are not useful if the income distribution differs. Furthermore, the ratios are not good benchmarks of absolute depth of outreach, whether across countries or within a country. An alternative might compare dollars disbursed with poverty-line income, perhaps adjusted for purchasing-power parity. The standards used to set the poverty line differ across countries, however, so median income might be a better benchmark. Unfortunately, data on median income are difficult to come by.

A second weakness of the ratio of dollars disbursed to per-capita GNP is its lack of a useful interpretation: the numerator is the flow disbursed as a loan, while the denominator is the flow from average income in a year. The two flows pertain to different time frames.

An alternative ratio compares cash inflows in a common time frame, cash inflows from loans in a year with cash inflows from income in a year:

$$\left(\frac{\text{Average dollars disbursed}}{\text{Per-capita annual GNP}}\right)\cdot\left(\frac{12}{\text{Average term to maturity}}\right). \tag{5}$$

Of course, cash from income, unlike cash from loans, does not need to be repaid. Still, this ratio is sensible because it compares annual flows with annual flows. In short, it accounts for time.

For the three example microlenders, this ratio was 1.6 for lender A, 1.7 for lender B, and 1.5 for lender C (Table 1, line j). Although lender C had the largest average dollars disbursed, the longest average term, and—as shown below—the second-largest average balance, its loans provided smaller cash inflows to repeat borrowers through time. This point of view is particularly relevant because the typical microfinance borrower takes several consecutive loans through time.

This new ratio also has another interpretation. It suggests that, compared with self-finance from savings, access to these example lenders allows borrowers to make investments that otherwise would have required saving 1.5 to 1.7 years of the typical per-capita income. Even assuming savings of 25 percent of income, access to loans allowed investments, all else constant, 6 to 7 years sooner than under self-finance.

2.3 Average balance

Average balance is the second-most common measure of loan size, mostly because it is simple to compute from readily available data. The right-hand side of Figure 1 shows the average balance as a vertical distance. Average balance measures the level of resources typically held in the term of the loan, without consideration for the length of the term to maturity.

For a borrower, average balance measures the resources typically provided by the loan during its term. Of course, this is also the typical debt burden, so, all else constant, poorer borrowers probably have smaller average balances.

For a lender, revenue (and default risk) are directly proportional to average balance. All else constant, loans with larger average balances are more profitable but are associated with less depth of outreach.

But not all else is constant. In particular, the average balance depends on the term to maturity and on the size, timing, and number of installments. For example, the average balance of a balloon loan with one repayment equals the amount disbursed, but the average balance of a loan repaid in equal installments is slightly more than half the amount disbursed (Rosenberg, 1999). Furthermore, a loan repaid in four weekly installments has about the same average balance as a loan repaid in four monthly installments. Average balance ignores term to maturity (and other aspects of loan size), so it is an imperfect measure.

2.3.1 Formulae

The average balance may be computed from publicly available data as the ratio of stocks at a point in time (usually year-end):

$$\text{Average balance} = \frac{\text{Dollars outstanding at year-end}}{\text{Number of loans outstanding at year-end}}. \tag{6}$$

This stock measure is susceptible to seasonality, and if a portfolio has grown rapidly, then it also can overstate the average balance of the average loan during the year. A ratio of annual averages avoids these issues:

$$\text{Average balance} = \frac{\text{Annual average value outstanding}}{\text{Annual average number of loans outstanding}}. \tag{7}$$

Which formula is most appropriate depends on data availability (year-end stocks are easier to obtain than annual averages) and on the question the measurement intends to inform. For a snapshot of the portfolio at a point in time, stocks are best; for a summary picture through a year, annual averages are best.

2.3.2 Examples

All three Latin American lenders grew rapidly in 1995, so year-end stocks (Table 1, lines k and l) exceed annual averages (lines a and d) from monthly data. The choice of formula (equation 6 versus 7) matters for comparisons among lenders; average balances computed from annual averages are smaller, compared with average balances computed from year-end stocks, for lender A ($388 to $440, lines m and n) and for lender B ($516 to $614), but larger for lender C ($656 to $562), probably because a sharp seasonal spike in small loans to traders at Christmas distorts the stock measure.

Average balance can provide a different picture of loan size than amount disbursed. Although lender C had larger amounts disbursed than B and A, if average balance is measured with annual averages, then lender B ($614) had larger loans than lender C ($562). The relationships differ even if average balance is measured with stocks: in this case, C is 27 percent larger than B (rather than 3 percent for amount disbursed) and 69 percent larger than A (rather than 38 percent).

2.3.3 International comparisons

For cross-country comparisons, common practice is to divide average balance by per-capita annual GNP:

$$\frac{\text{Average balance}}{\text{Per-capita annual GNP}}. \tag{8}$$

For lenders A, B, and C, this ratio was 0.43, 0.57, and 0.73 (Table 1, line o). But what exactly do these shares mean? Besides the weaknesses of per-capita GNP as a benchmark for depth of outreach that have already been discussed, the interpretation of the ratio is unclear because the numerator has units of resources borrowed per loan but the denominator has units of income per year.

An alternative ratio would compare dollar-years of resources provided by a loan to dollar-years of resources provided by income, if all income were saved. This ratio uses the concept of dollar-years of resources. A *dollar-year of resources* is a dollar's worth of resource held for 12 months, or, equivalently, 12 dollar's worth of resources held for one month, or 6 dollar's worth of resources held for 2 months, etc.

If income flows into a household in a constant stream and if all income is saved in a year, then the resulting dollar-years are half the total annual flow of income (that is, per-capita annual GNP $\div$ 2). The dollar-years provided by loans in a year—assuming repaid loans are renewed with identical loans—is the average balance multiplied by the number of loans in a year. Thus, the proposed alternative ratio compares dollar-years of resources from loans with dollar-years of resources from annual income, if it were all saved:

$$\frac{\text{Average balance} \cdot \left(\dfrac{12}{\text{Average term to maturity}} \right)}{\text{Per-capita annual GNP} \div 2}. \qquad (9)$$

As seen by this summary ratio, loan size was about the same for lenders A and B (2.6, Table 1, line p) and about 8 percent larger for lender C (2.8). This near-sameness contrasts with the much larger differences found through the lens of amount disbursed, term to maturity, and average balance. Again, the difference results from a more complete consideration of the passage of time.

2.4 Time between installments

Loan size increases with *time between installments*, the horizontal distance between steps in Figure 1. Obviously, this measure directly accounts for time.

For borrowers, more-frequent installments increase costs because, with less time to accumulate cash for repayment, the likelihood increases that net cash flows will be unusually low. For example, a street vender has more bad days than bad weeks, so daily installments are more likely to be late than weekly installments or monthly installments. Also, more-frequent installments imply greater transaction costs to actually make payments. Poorer borrowers are less able to absorb these costs.

For lenders, frequent installments affect costs (and thus profits) in three ways. First, costs increase because borrowers fall into arrears more often and thus must be dunned more. Second, costs increase because of the need to process frequent payments. Third, costs decrease because—all else constant—unusually risky borrowers are more likely to fall into arrears and draw attention to themselves before they have severe repayment problems.

In general, more time between installments implies less depth of outreach and both positive and negative effects on profits.

2.4.1 Measurement

The ideal way to measure the frequency of installments is with data on each loan outstanding at a point in time or on each loan disbursed in a year. If the average number of installments is known, then one alternative is:

$$\text{Frequency of installments} = \frac{\text{Average term to maturity}}{\text{Average number of installments}}. \tag{10}$$

Such data, however, are usually not available. A cruder (but more feasible) alternative is to ask the lender to estimate the typical (most common) frequency. The typical frequency, however, may differ from the average frequency. For example, if 30 percent of loans have weekly installments and 70 percent have monthly installments, then the typical frequency is monthly, but the average frequency is $0.3 \cdot 7 + 0.7 \cdot (365/12) \doteq 23$ days. The typical frequency is appropriate when most loans have the same frequency, while the average frequency is appropriate when no one frequency dominates.

2.4.2 Examples

For the example Latin American microlenders, the typical installment frequency (Table 1, line q) was 14 days for lender A, 28 days (4 weeks) for lender B, and 30.5 days (one month) for lender C. Like other measures of loan size already discussed, the typical frequency suggests that A makes smaller loans than B or C. Unlike most other measures, the typical frequency also suggests that loans from B and C are about the same size.

The average installment frequency (line r), computed from a sample of loans, was 13 days for lender A, 19 days for lender B, and 23 days for lender C. Again A is smaller than B or C, and now B, as by most other measures, is a bit smaller than C.

2.5 Number of installments

All else constant, loan size increases with the *number of installments*. This is pictured as the number of steps in Figure 1. This aspect does not consider time.

For borrowers, more installments mean more transaction costs to make payments. More installments also mean more chances to fall into arrears, and this increases the psychological costs of being in arrears and of dealing with enforcement visits from the lender. Thus, poorer borrowers generally have fewer installments.

For lenders, more installments increase costs (and decrease profits) because tellers and administrators spend more time on cash transactions. More installments also increase lender costs because loans have more chances to fall into arrears and to require enforcement visits. All else constant, more installments decreases profit.

More installments implies larger loans, less profit, and less depth of outreach.

2.5.1 Measurement

The best way to measure the average number of installments is with data on all loans outstanding at a point in time or on all loans disbursed in a year. This data is usually unavailable. A second-best proxy for the average number of installments is:

$$\text{Number of installments} = \frac{\text{Average term to maturity}}{\text{Average frequency of installments}}. \tag{11}$$

2.5.2 Examples

Lender A had the most installments per loan (9.6, Table 1, line s). Lender B came next (8.6), and lender C had the fewest (8.2). Unlike all measures of loan size discussed so far, the number of installments suggests that A has the largest loans, B the next-largest, and C the smallest. This shows again how loan size varies by aspect.

2.6 Dollars per installment

In Figure 1, the vertical distance between steps is *dollars per installment*. Higher steps mean larger loan sizes. This measure ignores time.

For borrowers, dollars per installment matters for depth of outreach because, all else constant, poorer borrowers are less likely to be able to pay large installments. For lenders, this aspect matters for lender profitability because larger installments help to dilute the fixed costs of the cash transaction. Thus, larger loans in terms of dollars per installment imply more profits and less depth of outreach.

2.6.1 Measurement

The ideal way to measure dollars per installment is with data on each installment due in a year, but external analysts rarely can get such data. A crude alternative that uses commonly available data is:

$$\text{Dollars per installment} = \frac{\text{Average dollars disbursed}}{\text{Average number of installments}}. \tag{12}$$

Equation 12 ignores the interest portion of installments. This omission matters most for absolute measures of loan size and for loans with large disbursements or long terms to maturity, but it is not a major issue for most comparisons among lenders.

2.6.2 Examples

Among the example lenders, A had the fewest dollars per installment ($52, Table 1, line t), B was intermediate ($77), and C was the largest ($83). The relationships are close to those for amount disbursed (8 percent difference between B and C, 60 percent difference between C and A).

2.7 Dollar-years of borrowed resources

The best summary measure of loan size is probably *dollar-years of borrowed resources*. In Figure 1, this is the shaded area southwest of the cash-flow steps. "Dollar-years of borrowed resources" accounts for time and incorporates all the other six aspects of loan size: term to maturity, dollars disbursed, average balance, time between installments, number of installments, and dollars per installment. Loan size increases with dollar-years of resources from a loan.

"Dollar-years of borrowed resources" measures the purchasing power provided by the loan and the time through which the borrower controls this purchasing power. For example, a $100 loan with one balloon installment after one year provides the use of a dollar for a year, or 1 dollar-year. A $100 loan repaid in 12 monthly installments provides 50 dollar-years; the purchasing power provided through time is the same as that of a $50 with one balloon installment after one year. Finally, a $100 loan repaid in 6 monthly installments provides 25 dollar-years; average balance in the 6 months is $50, and the $50 in half a year is equivalent to $25 in a full year.

For lenders, dollar-years per loan indicate the resources that earn revenue and that are at-risk of loss from default. This measure is better than average balance because, unlike average balance, it accounts for the term to maturity. On the whole, more dollar-years per loan imply greater profitability.

For borrowers, dollar-years per loan measures the typical debt burden as well as the amount of resources provided. Again, this is better than average balance because it accounts for the term to maturity. More dollar-years implies less depth of outreach.

2.7.1 Measurement

Given data typically available to an external analyst, an estimate of average dollar-years of resources from a loan is:

$$\text{Dollar-years} = \frac{\text{Average annual dollars outstanding}}{\text{Number of loans disbursed in a year}}. \tag{13}$$

In contrast to the average balance, which has units of dollars per loan, this measure has units of dollar-years per loan. If a portfolio has grown in the year, then this formula will slightly overestimate the true figure.

2.7.2 Examples

More than any other aspect of loan size, "dollar-years of borrowed resources" highlights the large differences among the three example lenders. While lender A provides 130 dollar-years per loan, lender B provides about 227 dollar-years, and lender C provides 337 dollar-years (Table 1, line u). In short, loans from lender C are 50 percent larger than loans from B and 160 percent larger than loans from A.

3. Discussion

3.1 Better measurement of loan size

This paper has discussed how seven aspects of loan size affect depth of outreach and profitability. The most common summary measures—dollars disbursed and average balance—ignore term to maturity. "Dollar-years of borrowed resources" is a better measure because it encompasses the other six aspects of loan size and accounts for time.

Furthermore, common ratios that compare average dollars disbursed or average balance to per-capita GNP lack useful interpretations. Better alternatives compare cash inflows from a loan to cash inflows from income or compare dollar-years from a loan to dollar-years from income, if all income were saved.

3.2 Depth of outreach and profitability

Greater loan size usually means more profitability for the lender but less depth of outreach for the borrower. Of course, improvements in efficiency (or other innovations) can increase both depth of outreach and profitability. Because poorer borrowers cannot demonstrate and guarantee their creditworthiness as well as less-poor borrowers, however, efficient lenders must trade off depth of outreach against profitability. Innovations can remove the trade-off temporarily, but the trade-off will reappear once lenders reach the efficiency frontier (Gonzalez-Vega, 1998; Rhyne, 1998).

3.3 Latin American examples

This paper used publicly available data to measure aspects of loan size for three large, microfinance organizations from Latin America. The main insight is that relative loan size varies widely by aspect. Small differences between lenders A and C in amount disbursed ($494 versus $681, or 38 percent) and in term to maturity (4 months versus 6.2 months, or 55 percent) exist side-by-side with large differences in the summary measure of "dollar-years of borrowed resources" (130 versus 337, or 160 percent).

3.4 Caveats

Measurements of loan size mean little in a vacuum. Good analyses will look for the why behind the measure of different aspects. For example, lender A might have small loans not because it lends to poor borrowers (and has greater depth of outreach) but because it is excessively conservative. Likewise, if lender A is more efficient than lender C, it might make smaller loans and yet also make larger profits.

Loan size for a lender should be analyzed through time. For example, an analysis of mission drift might look at loan size over a stretch of three or more years.

Other aspects of loans, aspects not discussed in detail here, also matter for both depth of outreach and profitability. Examples include interest rates, fees, guarantee requirements, and whether the loan is disbursed to an individual or through a group.

The fixation on loan size does not imply that bigger is better. What matters for social welfare is not that loans are large but rather that the aspects of loan size be tailored to the demand of the borrower, subject to the profitability and technological constraints of supply by a lender (Rutherford, 2000; Schreiner, 1999).

Finally, the measures in this paper are necessarily crude because they use only aggregate portfolio data, the data generally available to external analysts. A more complete analysis would use data on individual loans. This would allow, for example, analysis of medians instead of averages.

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Table 1: Aspects of loan size for three example Latin American lenders

Line	Aspect of loan size	Formula	Microfinance organizatic A	B	C
	1. Term to maturity				
a	Number of loans out., annual ave. (thousands)	Data	12.5	60.8	8.2
b	Number of loans disbursed in year (thousands)	Data	37.2	138.2	16.0
c	Ave. term to maturity	12*(a/b)	4.0	5.3	6.2
d	Dollars out., annual ave. (thousands)	Data	4,835	31,405	5,372
e	Dollars disbursed in year (thousands)	Data	18,391	90,942	10,880
f	Ave. term to maturity	12*(d/e)	3.2	4.1	5.9
	2. Dollars disbursed				
g	Ave. dollars disbursed	e/b	494	658	681
h	Per-capita annual GNP	Data	900	900	900
i	Ave. dollars disbursed/Per-capita annual GNP	g/h	0.55	0.73	0.76
j	Loan inflow/Income inflow in loan term	(g/h)*(12/c)	1.6	1.7	1.5
	3. Average balance				
k	Dollars out. at year-end (thousands)	Data	7,089	38,712	6,177
l	Number of loans out. at year-end (thousands)	Data	16	63	11
m	Average balance at year-end	k/l	440	614	562
n	Average balance during year	d/a	388	516	656
o	Average balance during year/Per-capita annual GNP	n/h	0.43	0.57	0.73
p	$-years from loan/$-years from income	[n*(12/c)]/(h/2)	2.6	2.6	2.8
	4. Time between installments				
q	Typical installment frequency (days)	Data	14	28	30.5
r	Average installment frequency (days)	Data	13	19	23
	5. Number of installments				
s	Average number of installments	c*(365/12)/r	9.6	8.6	8.2
	6. Dollars per installment				
t	Average dollars per installment	g/s	52	77	83
	7. Dollar-years of resources from a loan				
u	Average dollar-years of resources from a loan	d/b	130	227	337

Note: Monetary figures in units of constant December 1998

Figure 1: Seven aspects of loan size

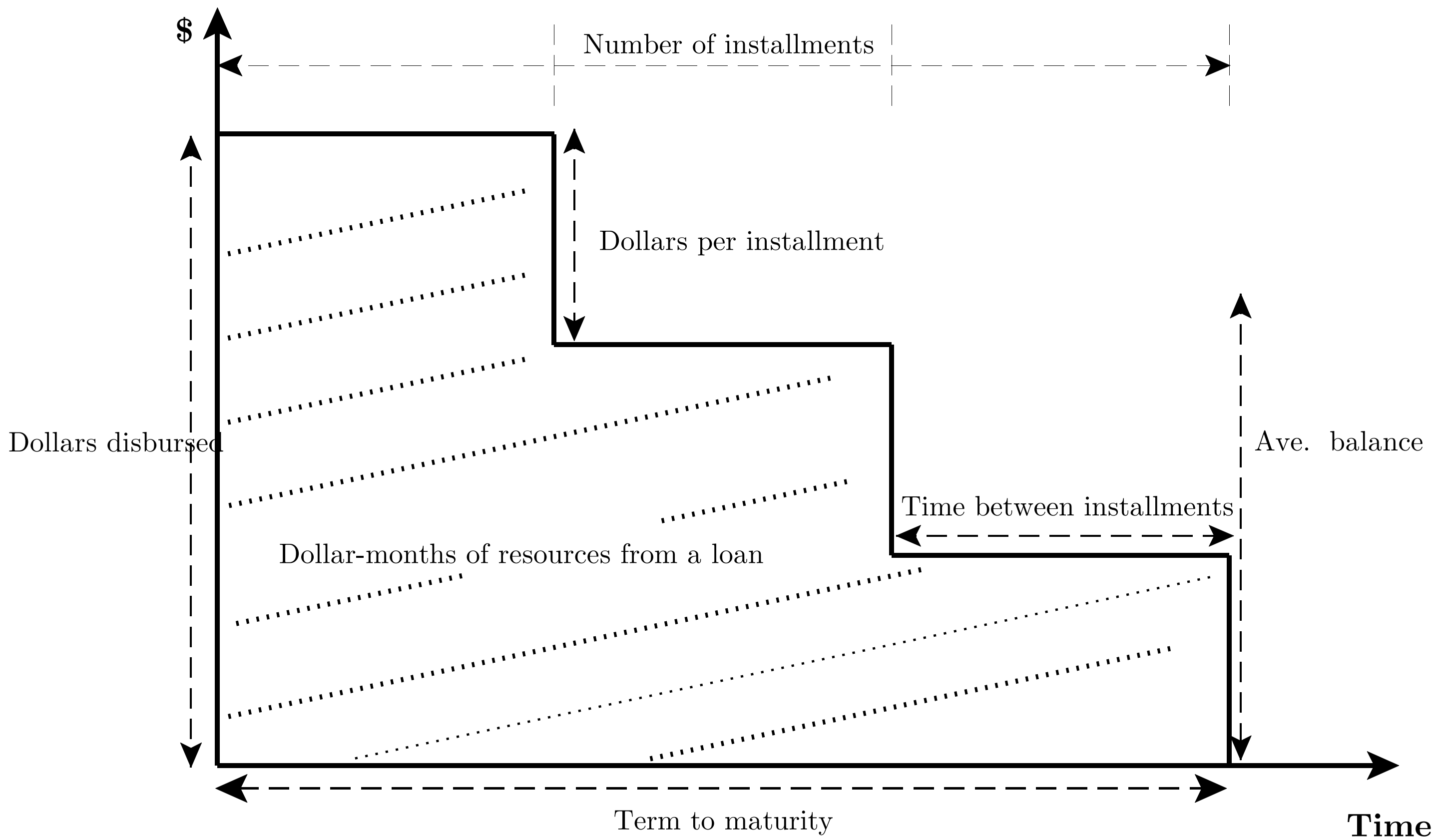

Figure 2: Loan size for lenders A and C